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Via Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: *Ex Parte* Presentation
ET Docket No. 09-36

Dear Ms. Dortch:

The Alfred Mann Foundation for Scientific Research ("AMF") responds to an *ex parte* filing on June 17, 2011, by the Society of Broadcast Engineers, Inc. ("SBE") addressing AMF's *ex parte* filings on April 8 and May 3, 2011, regarding various technical analyses and tests demonstrating the electromagnetic compatibility ("EMC") of medical micropower network ("MMN") devices and incumbent systems in the 413-457 MHz band.[1]

Contrary to SBE's unsubstantiated claim,[2] the technical analyses and tests performed to date provide substantial evidence that MMN devices can operate with no harmful interference from incumbent systems, including broadcast remote pickup ("RPU") stations operating at 455-456 MHz. Wrongly claiming that these tests involved only government land mobile and fixed systems, SBE relies solely upon the "JSC Report," which provided an analysis to evaluate the EMC of MMN devices and incumbent systems in the 413-457 MHz band. SBE, however,

[1] *See Ex Parte* Statement of SBE (June 17, 2011) ("SBE *Ex Parte*").

[2] *Id.* at 2.

wholly ignores the "Aerospace Test Report" and the "ITT Memorandum," both of which were submitted together with the JSC Report.[3]

Notably, the Aerospace Test Report documented various tests performed to evaluate certain MMN interference mitigation techniques.[4] The tests were performed using a wired test configuration designed to simulate radiofrequency ("RF") environments and generate potential interfering RF signals from the following incumbent systems under worst-case operational parameters: (1) mobile radio (data traffic); (2) mobile radio (voice traffic); (3) ground radar; (4) airborne radar; (5) enhanced position location reporting system; and (6) amateur television. These incumbent systems were representative of *both government and non-government systems* authorized for operation in the 413-457 MHz band. The Aerospace Test Report concluded that the test results verify that the AMF MMN system performs according to its specifications and specifically is able to perform the following interference mitigation techniques: (1) spectrally excise narrowband incumbent signals; (2) change channels without suspending critical functions; (3) shut down gracefully in a communication link loss scenario; and (4) sense the signal level of incumbent systems to avoid interference with incumbent systems by successfully changing channels.

Additionally, in the ITT Memorandum, Comsearch Government Solutions ("Comsearch"), as a subcontractor to the ITT Corporation ("ITT") conducted an independent review of the Aerospace Test Report and found that the test report adequately demonstrated the effectiveness of MMN interference mitigation techniques.[5] Based upon its review of the Aerospace Test Report and other technical documents, Comsearch/ITT recommended no additional testing, unless the MMN firmware is modified.

Like the Engineers for the Integrity of Broadcast Auxiliary Services Spectrum ("EIBASS"),[6] SBE asserts that RPU stations are significantly different from the incumbent systems that have been tested, but fails to explain how any special RPU operating characteristics would result in greater interference than that caused by the incumbent signals examined in the JSC Report and Aerospace Test Report. For example, SBE notes that RPU transmitters typically

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[3] *See* Letter from Cheryl A. Tritt, Counsel to AMF, to Marlene H. Dortch, Secretary, FCC (Apr. 8, 2011) (attaching test reports and other technical documents, including the JSC Report, ITT Memorandum, and Aerospace Test Report) ("April 2011 AMF Letter").

[4] *Id.* at 5-6.

[5] *Id.* at 5.

[6] *See* Letter from Cheryl A. Tritt, Counsel to AMF, to Marlene H. Dortch, Secretary, FCC (June 8, 2011) ("June 2011 AMF Letter") (responding to Rebuttal *Ex Parte* Comments of EIBASS (May 19, 2011)).

operate at an output power level of 40 to 100 watts.[7] The Aerospace Test Report, however, included testing of incumbent amateur TV and radar signals at significantly higher power levels of up to one kilowatt and one megawatt, respectively. Additionally, as AMF previously stated, the continuous operation of portable RPU base stations from fixed locations allows MMN systems to detect the RPU signals more easily and thus change channels to avoid harmful interference, if required.[8] Furthermore, the relatively narrowband operation of most, if not all, RPU stations allows an MMN system to spectrally excise, or notch out, the narrowband RPU signals, thus enabling the MMN system to transmit and receive its own wideband signals.[9]

Based upon the foregoing, AMF urges the Commission to reject the unsubstantiated claims raised by SBE and promptly adopt rules to facilitate deployment of MMN systems that will offer invaluable health and public interest benefits for millions of disabled Americans.

Sincerely,

/s/ Cheryl A. Tritt
Cheryl A. Tritt
Counsel to the Alfred Mann Foundation for Scientific Research

cc: Julius Knapp
Geraldine Matise

[7] *See* SBE *Ex Parte* Statement at 5.

[8] *See* June 2011 AMF Letter at 3.

[9] *Id*.